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| 10/560,033 | 12/08/2005 | Mutsumi Wakai | 053451 | 8322 |

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| EXAMINER | |
|---|---|
| KASHNIKOW, ERIK | |

| ART UNIT | PAPER NUMBER |
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| 1794 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/560,033 | WAKAI ET AL. | |
| | Examiner | Art Unit | |
| | ERIK KASHNIKOW | 1794 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *03 February 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1 and 3-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/03/10 has been entered.

### *Claim Objections*

2. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The first claim already claims a bottle (a form of container) with a label being heat shrunk thereon.

### *Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 6 and 7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 11/596,678 in view of Ikeda et al. (US 6,214,476). Although the conflicting claims are not identical, they are not patentably distinct from each other because while claim 1 does not teach an overcoat layer in light of the open language of the claim1, i.e. comprising, it is clear that claim 1 is open to the inclusion of additional layers, including an overcoat layer as required in 11/596,678. With regards to claim 7 the only difference is the range of linear low density polyethylene. The present claims require 45-5% whereas the copending claims claim 45-10%, which leaves a difference of 5% on the lower end of the scale, however it would have been obvious to one of ordinary skill in the art that the amount of linear low density polyethylene disclosed in the copending claim falls completely with in the broad range presently claimed and thus one of ordinary skill in the art would have arrived at the present invention. It is further pointed out that labels are designed to go on containers, and polyethylene terephthalate bottles are one of the most common forms of containers so it would have been obvious to one of ordinary skill in the art to attach said label to a pet container and to provide

perforations to make it easier to remove said label. Further Ikeda et al. teach that petroleum resin acts as a tackifier when mixed in with polyolefin resins (column 6 lines 48-54). Ikeda et al. teach that the tackifier is present in amounts from 50-99% by weight of the olefin (column 4 lines 40-55). As all components of the instant invention are present and with in the ranges claimed, the lateral direction shrinkage of the invention of Ishige, Arjunan and Ikeda would intrinsically be the same. One of ordinary skill in the art at the time of the invention would be motivated to add the tackifier because it results in increased adhesion between layers (column 1 lines 7-16).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1, 6 and 7 directed to an invention not patentably distinct from claim1 and 2 of commonly assigned 11/596,678. Specifically, although the conflicting claims are not identical they are not patentably distinct for the reasons set forth in paragraph 3 above.

6. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 11/596,678, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were

commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim1, 4-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satani et al. (US 2002/0192412), Ishige et al. (US 2002/0155277) in view of Arjunan et al. (WO 98/44043), Ikeda et al. (US 6,214,476) and Nojima et al. (US 2001/0038204).

9. In regards to claim 1 Satani et al. teach polyethylene terephthalate (hereinafter PET) bottles with heat shrunk labels attached thereon (paragraph 0001)Ishige et al. teach a mutlilayered stretched resin film with excellent printability that can be used as a label (paragraph 0001). Satani et al. teach that the outer label may be comprised of cycloolefins and mixed with a polyethylene (paragraph 0032). Satani et al. further teach that the intermediate layer maybe comprised of polyethylene (paragraph 0022). It is

noted that Satani et al. teach other layers may be added, but are silent with regards to specific formations.

10. As disclosed above Satani et al. teach a PET container with a heat shrunk label comprising 3 layers, however they are silent with regards to the use of polypropylene as the inner layer.

11. In regards to claims 1 and 7 Ishige et al. teach multi layer films that may be used as labels with at least 2 different layers, Layer A, a base layer, which contains 40-90% a polyolefinic resin and 10-60% an organic filler (corresponding to applicants intermediate film layer), and layer B containing 0-85% a polyolefinic resin and 15-100% of an amorphous resin (corresponding to applicants front-back film layers). Ishige et al. also teach an optional surface layer, Layer C (paragraph 0019). In regards to layer A Ishige et al. teach that the polyolefinic resin maybe a polypropylene alpha olefin copolymer resin, and specifically an ethylene propylene random copolymer (paragraph 0023). Further Ishige teaches that it is known in the art that the polypropylene copolymers and the polyethylene copolymers are known equivalents as intermediate layers in labels (paragraph 0023), as such it would be obvious to one of ordinary skill in the art at the time of the invention to use the polypropylene resin of Ishige in place of the polyethylene resin of Satani et al. Ishige et al. further teach that the organic filler can be cyclopolyolefins (paragraph 0027). In regards to layer B Ishige et al. teach that the polyolefinic resins for layer B follow the same limitations of the polyolefinic resin in layer A (paragraph 0034), which includes polyethylene with densities between 0.89-0.97g/cm3 which encompasses the range of linear low density polyethylene's (LLDPE).

Ishige et al. further teach that the amorphous resin is typically exemplified as a cycloolefinic resin (paragraph 0036). Ishige et al. teach that typical film embodiments will have layers sequenced C/B/A/B (paragraph 0060). In regards to the haze as all the materials are the same and present in the concentration ranges claimed, the film must necessarily have the same haze range. It is also noted that haze is defined as the difference between gloss at 60 and 20O, where as opacity is the degree to which a coating will obstruct the surface it has been applied to (http://www.bamr.co.za/appearance.shtml). Examiner points out that an article may be glossy and opaque. Further it is noted that Ishige et al. teach that the film preferably has an opacity of 70% and higher so that a paper like texture is obtained. It is noted that it is obvious to eliminate a step or element and its function (paragraph 0059). As the instant application does not require a paper like texture it would be obvious to lower the opacity since the property on which opacity is depend upon for is not desired (MPEP 2144.04 II A).

12. In regards to claim 8 Ishige et al. teach that another layer sequence for their film can be C/B/A/B/C (paragraph 0079).

13. One of ordinary skill in the art at the time of the rejection would be motivated to modify the invention of Satani et al. with that of Ishige because the invention of Ishige offers improved printing properties including excellent ink drying property, and less causative waving or entire curling of the film due to printing procedures (paragraph 0009).

14. While Satani et al. and Ishige et al. teach the composition and the layer sequence of the film they are silent about specifically using LLDPE.

15. Arjunan et al. teach LLDPE resins which are improved in their ability to be formed into a film layer (page 3 lines 19-20).

16. In regards to claim 1 and 7 Arjunan et al teach that LLDPE is desirable as a resin for films because of its relatively low cost compared to other resin types and its excellent mechanical, physical and chemical properties (page 2 lines 25-30).

17. In regards to claims 4 and 9 Arjunan et al. teach that the LLDPE can be one which is produced with metallocene based catalyst systems (page 6 lines 14-19).

18. In regards to claim 5 and the physical/mechanical properties of claim 1 while Ishige et al. and Arjunan et al. are silent regarding the properties claimed by applicant, Ishige et al. and Arjunan et al. teach all the materials and limitations of applicant and the physical properties are therefore considered inherent.

19. In regards to claims 6 and 10 Examiner points out that the claims will be treated as product by process claims (MPEP 2113) specifically the portion of the claim that is treated in this manner is “the label being heat shrunk onto the container body”. Ishige et al. teach that the films of their invention are useful as labels (paragraph 0001). It is obvious to one of ordinary skill in the art at the time of the invention that labels are placed onto containers.

20. One of ordinary skill in the art at the time of the invention would be motivated to modify the films of Satani et al. and Ishige et al. with that of Arjunan et al. because the films of Ishige et al. which offers improved drying properties and is excellent in printing

property (paragraph 0009 and 0010), would benefit from the low cost and excellent mechanical/physical/chemical properties of Arjunan et al. (page 2 25-30).

21. As stated above Satani et al., Ishige et al. and Arjunan et al. teach multilayer films that can be used as labels, however they are silent regarding petroleum resins mixed with the random propylene copolymer.

22. Ikeda et al. teach film compositions with enhanced adhesion and gas barrier properties (column 1 lines 7-11).

23. In regards to claims 1 and 7 Ikeda et al. teach that petroleum resin acts as a tackifier when mixed in with polyolefin resins (column 6 lines 48-54). Ikeda et al. teach that the tackifier is present in amounts from 50-99% by weight of the olefin (column 4 lines 40-55). As all components of the instant invention are present and with in the ranges claimed, the lateral direction shrinkage of the invention of Ishige, Arjunan and Ikeda would intrinsically be the same as well as any other mechanical, chemical and physical properties.

24. In regards to claim 13 as the same materials as the instant invention are taught in the same concentrations the shrinkage in the lateral direction would intrinsically be the same when done under the same conditions.

25. One of ordinary skill in the art at the time of the invention would be motivated to modify the film of Satani et al, Ishige et al. and Arjunan et al. with those of Ikeda et al. because the films of Ikeda et al. because the multilayer films of Ishige et al. and Arjunan et al. which have excellent printing properties and low cost would benefit from the

external appearance shrinkabillity and adhesion between layers of Ikeda et al (column 1 lines 7-16).

26. As stated above Satani et al., Ishige et al. and Arjunan et al. teach multilayer films that can be used as labels, however they are silent regarding the labels being treated by a perforation process.

27. In regards to claims 1 and 7 Nojima et al. teach that it is known in the art to perforate labels that are used on PET bottles (paragraph 0045 and 0046). It is pointed out that in order to have perforations on the labels the labels must of undergone some form of perforation processing, further In regards to claim 1 and 7, Examiner is treating it as a product by process claim, specifically regarding the term "perforation processing". It has been shown that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113 and *In re Thorpe,* 777F.2d 695, 698, 227 USPQ 964, 966). Therefore as the label has perforations it meets the limitations of the claim. One of ordinary skill in the art at the time of the invention would be motivated to modify the film of Satani et al, Ikeda et al, Ishige et al. and Arjunan et al. with that of Nojima et al. because the invention of Nojima et al. offers ease of separating the label from said container (paragraph 0046).

28. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Satani et al. (US 2002/0192412), Ishige et al. (US 2002/0155277) in view of Arjunan et al. (WO 98/44043), Ikeda et al. (US 6,214,476) and Nojima et al. (US 2001/0038204) as applied to claim 1 and in further view of Tanaka et al (US 5,695,838).

29. As stated above Ishige et al. and Arjunan et al. teach multilayer films that can be used as labels, however they are silent regarding low crystalline alpha olefin copolymers.

30. Tanaka et al. teach adhesive polypropylene compositions and multilayer articles containing said composition (column 1 lines 8-10).

31. In regards to claim 3 Tanaka et al. teach that a polypropylene resin, including copolymers of polypropylene and other alpha olefin co-monomers is mixed with a modified polyolefin, which is preferably a low crystalline ethylene/alpha olefin copolymer base resin (column 2 lines 1-65).

32. One of ordinary skill in the art at the time of the invention would be motivated to modify the film of Satani et al, Nojima et al, Ishige et al. and Arjunan et al. with those of Tanaka et al. because the films of Ikeda et al. and because the multilayer films of Ishige et al. and Arjunan et al. which have excellent printing properties and low cost would benefit from the excellent adhering force in both the drawn and undrawn state of the films of Tanaka et al. (column 1 lines 45-47).

33. Claims 11, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satani et al. (US 2002/0192412), Ishige et al. (US 2002/0155277) in view of

Arjunan et al. (WO 98/44043), Ikeda et al. (US 6,214,476) and Nojima et al. (US 2001/0038204) in further view of Hoffman (US 4,416,714).

34. As stated above Ishige et al. Ikeda et al. and Arjunan et al. teach a heat shrink film used as a label which comprises a cyclic polyolefin and LLDPE that would intrinsically have the same shrinkage in the lateral direction as well as the same mechanical physical and chemical properties, however they are silent regarding forming a tube of the film before and attaching said tube of film as a label.

35. Hoffman teaches methods for attaching heat shrink labels (column 1 lines 15-20).

36. Hoffman teaches that a method for attaching heat shrink labels to containers consists of taking a film and forming a tube wherein the leading edge of the tube overlaps with the trailing edge of the tube, and then heat shrinking the label to the container (column 1 lines 58-64).

37. In regards to claim 14 as the same materials as the instant invention are taught in the same concentrations the shrinkage in the lateral direction would intrinsically be the same when done under the same conditions.

38. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Satani et al, Nojima et al, Ishige et al. Ikeda et al. and Arjunan et al. with that of Hoffman because the invention of Hoffman offers saves material and energy, and therefore saves money (column 6 lines 60-67).

***Response to Arguments***

39. It is noted that the double patenting rejection will be held in abeyance.

40. In response to Applicant's arguments regarding the 35 U.S.C. 112 1st paragraph rejection, the arguments presented on 02/03/10 were persuasive and the 112 1st paragraph rejections of the claims has been withdrawn.

41. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

42. In response to applicant's argument that the references do not teach the recycling benefits disclosed by applicant, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

43. It is noted that while Ishige, Nojima et al, Arjunan, Ikeda, Tanaka and Hoffman do not disclose all the features of the present claimed invention, they are used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, and in combination with the primary reference, discloses the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there would be no need for secondary references.

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik Kashnikow whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (Second Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikow
Examiner
Art Unit 1794

/Rena L. Dye/
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